Date: Thu, 8 Sep 94 04:30:14 PDT

From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>

Errors-To: Ham-Ant-Errors@UCSD.Edu

Reply-To: Ham-Ant@UCSD.Edu

Precedence: Bulk

Subject: Ham-Ant Digest V94 #300

To: Ham-Ant

Ham-Ant Digest Thu, 8 Sep 94 Volume 94 : Issue 300

Today's Topics:

2 meters quad help
AC House wiring used as antenna?
Antenna gain ratings?
apartment antennas
Comet Miracle Baby HT - Is this good?
HERE's a tough one for you
Info on Autek SWR/Z/L/C Meter
modem
Two Beverages - Revisited

Two Beverages - Revisited
Wanted: UHF Log Periodic 300-400mHz

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu> Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

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Date: 7 Sep 94 23:24:38 GMT From: news-mail-gateway@ucsd.edu Subject: 2 meters quad help

To: ham-ant@ucsd.edu

## Hello folks!

I will like to build a 2-element quad to ise on 2 meters band.

I need the dimension and spacing for the elements, and how I can build

a suitable balun for this antenna.

Can anyone help me? Any comment will be appreciated.

73 de Mike

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Date: 7 Sep 1994 07:52:01 -0400

From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net

Subject: AC House wiring used as antenna?

To: ham-ant@ucsd.edu

In article <slayCvpv5y.4B7@netcom.com>, slay@netcom.com (Sandy Lynch)

writes:

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At first glance ..... the obvious answer about using a house's AC system as an antenna will either have people gasping at the mere thought of it .. or laughing out loud. However, I seem to recall hearing stories that during World War 2, when Hams were ordered off the air for the duration .. some would put RF into the AC mains and would actually be able to QSO with other local hams... Can any old, old timers out there comment on this as well?

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I've got plans for a receive antenna that uses house wiring. You cut the end off of an extension cord, wrap it in electrical tape, lay an insulated wire down the groove between the two wires of the cord and wrap the whole thing in tape. Run the wire to your rig (I think tuner would be best). It is then suggested to make a long cylinder of aluminum foil, put it over the whole shebang, and slide it up and down for resonance. Might work for receive (oh the noise!), but I think transmit would be a nightmare, with all the junctions rectifying RF etc.

72, jim n0oct

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Date: Wed, 7 Sep 1994 08:15:12 GMT

From: ihnp4.ucsd.edu!sdd.hp.com!spool.mu.edu!howland.reston.ans.net!pipex!bbc!ant!

boyer@network.ucsd.edu

Subject: Antenna gain ratings?

To: ham-ant@ucsd.edu

Jeff DePolo (depolo@blue.seas.upenn.edu) wrote:
: In article <kgk-0609941536070001@kgkmac.repoc.nwu.edu>,

: Kenneth Kalan <kgk@nwu.edu> wrote:

Other stuff deleted.

: db alone can mean either dBi or dBd - it should be expressed somewhere which : the writer is referring to. As a general rule of thumb, dBd is used when : referring to a measured value, and dBi when referring to a calculated : value. For example, Cushcraft takes their new antenna out to the test : range. They use a half-wave dipole as a reference. They find that their : new super yagi has 6.9 dB of gain over their half-wave dipole reference : antenna.

I doubt very much that they do this. If they do it's almost certainly going to be wrong. There will be different ground reflections from each antenna and this means the received signal level will vary. They probably measure the pattern in the e and h planes and then assume how the pattern varies in between and then work out the pattern gain. Of course they may have a reflection free range!! I have a pig that plays the piano.

They may also have the clever H.P. gating box that allows you to ignore reflections in pattern measurement, but doesn't allow gain measurement by substitution because of its wide bandwidth.

: So, the yagi has 6.9 dBd gain. However, for things such as : effective radiated power, the calculations are done with respect to : an isotropic radiator (EIRP), so 100 watts of transmitter power output : (abbreviated TPO) into this yagi would give an EIRP of about 800 watts, : assuming no feed line loss of course.

## Maximum ERP!!!!

: It has been my experience that Cushcraft, Diamond, Comet, and several of the other manufacturers inflate their gain figures. Assume that the numbers they give are dBi unless otherwise stated. Remember: marketing guys write the catalogs, not the engineers. To the marketing guys, 9.0 dB looks better than 6.9 dB, so they use the 9.0 value and leave off the "i" in dBi.

Yes, and I'm sure it winds you up as much as it does me.

John B
John.boyer@rd.eng.bbc.co.uk

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Date: 04 Sep 94 13:08:14 +0200

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!EU.net!Germany.EU.net!news.dfn.de!

news.belwue.de!delos.stgt.sub.org!life.sub.org!

Manfred\_Eichenbrenner@network.ucsd.edu

Subject: apartment antennas

To: ham-ant@ucsd.edu

Hello jonathanjh@aol.com,

j> Have you tried the AEA Isoloop? It doesn't take much space, and

j> performs very well on 10-30.

can you tell something more about it, please?

with a friendly smile, Manne...

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Date: 7 Sep 1994 08:18:45 -0400

From: news1.digex.net!digex.net!not-for-mail@uunet.uu.net

Subject: Comet Miracle Baby HT - Is this good?

To: ham-ant@ucsd.edu

Hi,

I have lost my HT antenna - so I am looking for a good replacement. I have a Kenwood TH-78A - should I just get the original equipment antenna or get a Comet Miracle Baby? I have been looking around for a short, but good, antenna - most are 12" which is better than 1.25" but I would like to have something shorter rather than longer. If there is a FAQ about this please point me in the direction of this file.

73s, Fernie KE4MAI

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Date: 7 Sep 1994 11:47:20 GMT

From: cronkite.cisco.com!mvermeer-ssclx!mvermeer@ames.arpa

Subject: HERE's a tough one for you

To: ham-ant@ucsd.edu

Hi,

A log-periodic antennae could be a good solution depending on how high a gain you want. Commercially available log-per's have an extremely high bandwidth (50-1200 MHz?) and a gain that is depending on the frequency but that looks impressive to me. Disadvantage is the price.

I have been playing with the idea to design/build a log-per for 100-500MHz.

Marc, OS2AMV

Date: 7 Sep 94 20:38:10 GMT

From: uswnvg!jdonimi@uunet.uu.net Subject: Info on Autek SWR/Z/L/C Meter

To: ham-ant@ucsd.edu

I was just about to buy the \$219 MFJ SWR meter with resistance meter when I saw the Autek ad. At \$129, it's worth checking out...

Does anyone own one of these Autek meters? If so, do you like it? How well do the various functions work? Is it convenient to use?

Is there an owner in the Seattle, WA area who would be willing to give me a demo of the Autek?

Thanks,

Jeremy WA7YGB

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Date: Wed, 7 Sep 1994 09:01:17 GMT

From: psinntp!hk.super.net!news.ust.hk!hpg30a.csc.cuhk.hk!hkuxb.hku.hk!

hkuxa.hku.hk!h9207737@uunet.uu.net

Subject: modem

To: ham-ant@ucsd.edu

hello,

I will do a project called '900MHz modem RF design' which is one part of a basestation used in mobile radio communication. Ca some books for me to read?

Also, where do I get literature/data-books on RF?

Thanks!!

philip

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Date: 7 Sep 94 17:09:13 GMT From: news-mail-gateway@ucsd.edu Subject: Two Beverages - Revisited

To: ham-ant@ucsd.edu

I have probably beat this issue to death by now. At the possible risk of boring you all again, I come to you with a humble request for help w/a newly erected 2 wire Beverage.

Has anyone used a termination at the far end that consists of a transformer as per Misek's book on the subject? If so, could you share your experiences with me. Do you find the antenna as good as a terminated single-wire antenna. My experience has been (subjective) that the 2 wire doesn't perform as well in either direction as a single wire resistor terminated affair.

Thanx for taking the time to read this.

73 de Walt Kornienko - K2WK Internet: waltk@pica.army.mil
DX PacketCluster: K2WK > W3MM (FRC) Packet: K2WK@N2ERH.NJ.USA.NOAM

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Date: 7 Sep 1994 22:27:09 -0400

From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net

Subject: Wanted: UHF Log Periodic 300-400mHz

To: ham-ant@ucsd.edu

Looking for Mil. surplus ant. Will pick up in New England or pay shippping elsewhere.. Email price / condition.

sean1916@aol.com

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End of Ham-Ant Digest V94 #300

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